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ARRANGEMENT FOR CONVERTING BETWEEN A MEDIA INDEPENDENT INTERFACE AND A TWISTED PAIR MEDIUM USING A FIELD PROGRAMMABLE GATE ARRAY

ABSTRACT OF THE DISCLOSURE

An integrated network test device has network logic configured for performing prescribed network device operations and outputting network data based on a media independent interface (MII) based protocol, first test logic configured for performing prescribed test operations on the network data and outputting test data based on the MII-based protocol, and second test logic configured for converting the test data, output from the first test logic according to the MII-based protocol, into analog-based signals for transmission on twisted pair media. The integration of the network logic, the first test logic, and the second test logic dramatically simplifies testing systems, since the integrated network test device can be coupled to test equipment such as a traffic generator, using a relatively simple twisted pair or 10 BaseT connection, as opposed to more complex MII cabling.